Chapter 10

ADAPTIVE MANAGEMENT AND IMPLEMENTATION

The management and implementation structure for the Lower Columbia Steelhead Conservation Initiative (LCSCI) is still being developed but is expected to involve several key elements. These include: systematic use of an adaptive management decision-making process that includes a strong linkage to independent scientific review of technical aspects of the plan, consistency with the Joint Natural Resources Cabinet (Joint Cabinet) State Salmon Strategy Framework as currently drafted (Appendix 1) and is further developed including its underlying components, guidelines, and accountability to ensure actions are aimed at priorities, and consistency with current legislative intent.

Adaptive management requires development and implementation of technically sound management strategies that are designed to generate valid information to address priority uncertainties and thus inform decision-making (Walters 1986; Kershner 1997). The LCSCI will engage all partners to use a comprehensive and adaptive approach that will purposefully implement key strategies regardless of uncertainty in a manner that can be effectively monitored and evaluated. A key ingredient of this approach will be to establish a mechanism for systematic review and monitoring of resource status, strategy effectiveness, and implementation compliance so that timely decision-making and redirection can take place as needed. A cornerstone of this approach is that all involved possess a commitment to responding to new information calling for change even if it is unpopular. It is important to view this implementation management framework as an initial approach that itself may change over time.

In summary, although additional development work and refinement are needed to fully shape the LCSCI adaptive management and implementation framework, several key working principles currently underlie the approach:

- 1. Planning will be comprehensive and coordinated with all levels of government, partners, and stakeholders,
- 2. The status and outcomes of implemented conservation actions will be summarized and made accessible to the public for review and comment on a systematic basis,
- 3. Independent technical review of the LCSCI will be performed on a regular basis, and
- 4. Implementation progress of the LCSCI will be monitored systematically. This may take the form of an annual or biennial state of the salmon and steelhead report or audit.

It is important to understand that the development and implementation of the LCSCI will reflect an ongoing and evolving process, not an endpoint. Various technical, budgetary, and operational uncertainties exist and others will undoubtedly arise. Issues and measures associated with the conservation requirements for other salmon and trout species at risk in the LCSCI area will need to be assessed and incorporated. The partners to the LCSCI will utilize internal and external technical resources, coupled with

public involvement processes to continue to identify and shape conservation actions which address identified factors for decline, now and into the future.

Independent Scientific Review

An independent scientific review of this draft of the LCSCI will be performed to help identify concerns and ensure the initiative addresses appropriate factors for decline. It will also suggest how likely the initiative will be in meeting its stated goals and objectives. Such scientific review will occur at systematic intervals as a routine part of the adaptive management process. This will help provide a quality assurance mechanism to ensure assumptions associated with the critical uncertainties in the existing plan are systematically addressed and resolved. It should be noted that a formal structure for independent scientific review is built in to legislation that is currently under consideration (ESHB 2496).

Draft State Salmon Strategy Framework

The Salmon Strategy Framework drafted by the Joint Natural Resources Cabinet and approved by the Governor in January, 1998 will provide the overarching framework for underlying regionally-based conservation efforts like the LCSCI. The draft salmon strategy addresses all threats to salmon, often categorized as "the Four H's": harvest, hatcheries, hydropower, and habitat. The strategy provides a balanced approach to these four areas because all the threats to salmon recovery are interrelated. However, the strategy does focus special efforts on improving habitat.

It is envisioned that the draft State Salmon Strategy will be implemented at multiple geographic scales, or levels. The first level will be a set of statewide strategies for addressing specific threats to salmon, such as a plan for reducing nonpoint source pollution, incentive programs, a schedule for conducting watershed studies, and other initiatives. The second level will be the sum of all the state's local watershed plans. Written with local resources, these plans will identify the problems and solutions for allocating water and saving fish within individual "water resource inventory areas." The third level will be regional (multi-watershed) initiatives, such as the LCSCI.

To help build partnerships, the Governor convened the Government Council on Natural Resources. In addition to the Joint Cabinet, that Council includes representatives from cities, counties, federal agencies, the Legislature, and treaty tribes. The Council will provide a forum for coordination, information sharing, and partnering opportunities among the primary governmental entities that will have a hand in implementing salmon protection efforts.

At the local level, the plan envisions integrated watershed management through officially sponsored planning groups that develop watershed plans that address local issues of water

quality, water availability and stream flows, and habitat. A framework for integrated watershed management is currently being considered by the legislature (ESHB 2514).

State Environmental Policy Act

Within the framework of the State Salmon Strategy, strategies and plans will be developed at three different levels: (1) comprehensive and statewide strategies, policies, and plans; (2) initiatives or plans at the evolutionarily significant unit (or distinct population segment - USFWS) scale; and (3) watershed management plans for one or more, or portions of, Water Resource Inventory Areas (WRIAs). Compliance with the State Environmental Policy Act (SEPA) is relevant to each of these levels of planning, but the Joint Cabinet's most immediate responsibility is to comply with SEPA for statewide and ESU levels of planning such as the LCSCI. Addressing SEPA requirements for local watershed planning will be the responsibility of the convening local government.

Assuming that SEPA exemptions are not applicable and that the final State Salmon Strategy and ESU-level plans are "actions" under SEPA, compliance with SEPA is expected to require two steps: (1) determination of a lead agency, and (2) conducting and documenting the environmental analysis and public review processes required by SEPA.

Issues associated with SEPA compliance for the State Salmon Strategy and ESU-level plans are currently being reviewed by the Joint Cabinet. One basic approach under consideration at this time is to use a Determination of Significance with Adoption of the existing Final Environmental Impact Statement (FEIS) for the Wild Salmonid Policy (WSP). An adoption of the WSP FEIS would acknowledge and utilize the analysis, documentation, and public process that were completed as part of developing the WSP without either endorsing or rejecting the WSP as state policy. As the State Salmon Strategy and each ESU-level plan such as the LCSCI are developed and go through public review, specific SEPA determinations will be made. If additional information and analysis is determined to be needed beyond what was included in the WSP FEIS, then either an addendum (additional information only) or a supplemental EIS (both additional information and analysis of alternatives) to the WSP FEIS will be prepared. These determinations under SEPA for the LCSCI will be made prior to any adoption of a final LCSCI document by the Joint Cabinet.

Implementation Monitoring

In addition to other forms of steelhead stock and habitat monitoring as described in Chapter 16 and Appendix 6, *implementation monitoring* is a critical component of the LCSCI. It addresses the following question: *Were the adaptive management processes* (*including technical and public review and input*) and conservation actions *implemented as planned?* It requires development of an organized tracking and reporting system that draws upon available information and adds new elements so that the status of specific activities and commitments to their support, including funding, can be

accessed and evaluated. A comprehensive implementation monitoring reporting system for the LCSCI will be developed to integrate tracking of all elements of the plan including biological, operational, and budgetary components. The implementation tracking must also be linked to monitoring of steelhead stocks and habitat conditions both within and between watersheds to evaluate the effectiveness of implemented actions.

Legislation

At the time of this writing, the Washington State legislature was in session working on several bills having relationships to salmonid recovery and habitat restoration. These included bills with specific linkages to potential implementation and funding of the LCSCI and related conservation actions (e.g., ESHB 2496, 2514, 2836). The eventual outcome of these bills was unclear and thus the implications of these bills could not be addressed in this draft of the LCSCI. These bills have many provisions relevant to the LCSCI, including a Governor's Salmon Recovery Office, an independent science review panel, integrated watershed management, regional habitat restoration councils, fish passage barrier removal, and supplemental budget funding. The relationships of any new legislation or funding to the LCSCI will be addressed and incorporated in the next LCSCI document.